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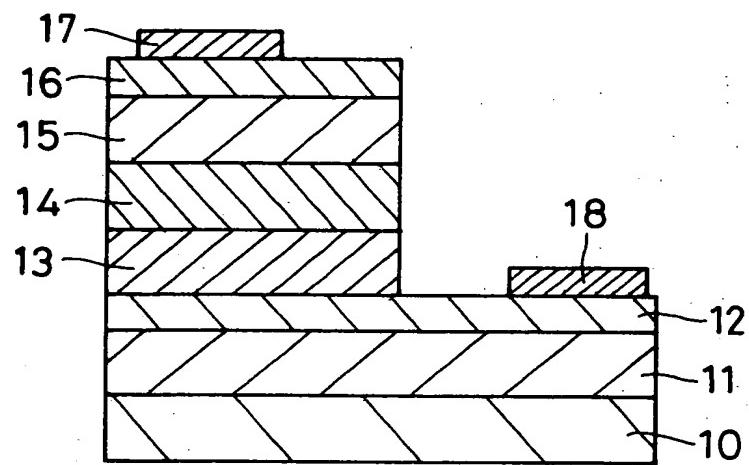
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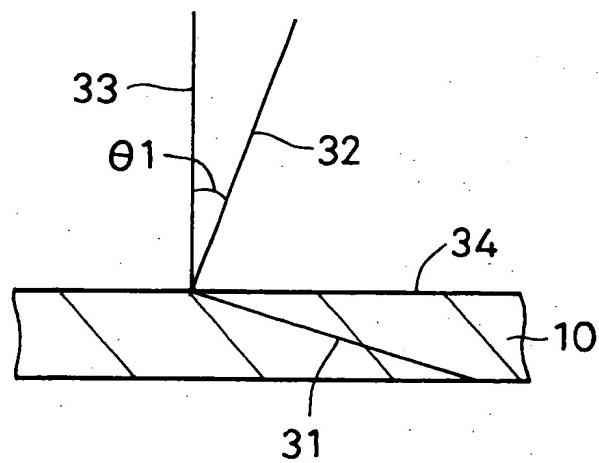
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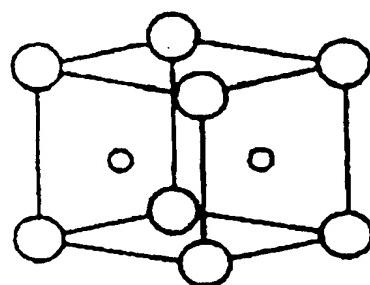
**FIG. 1**



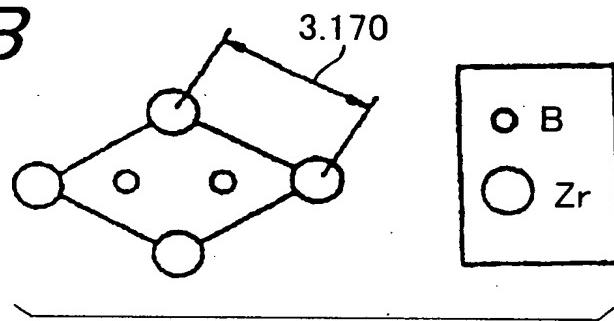
**FIG. 2**



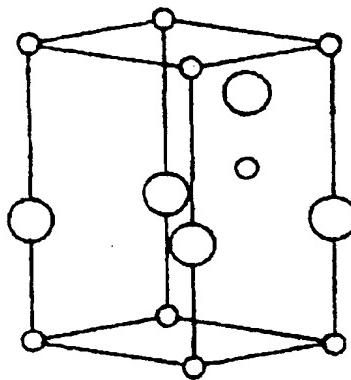
*FIG.3A*



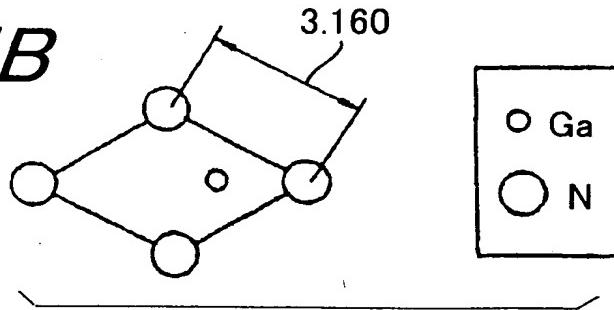
*FIG.3B*



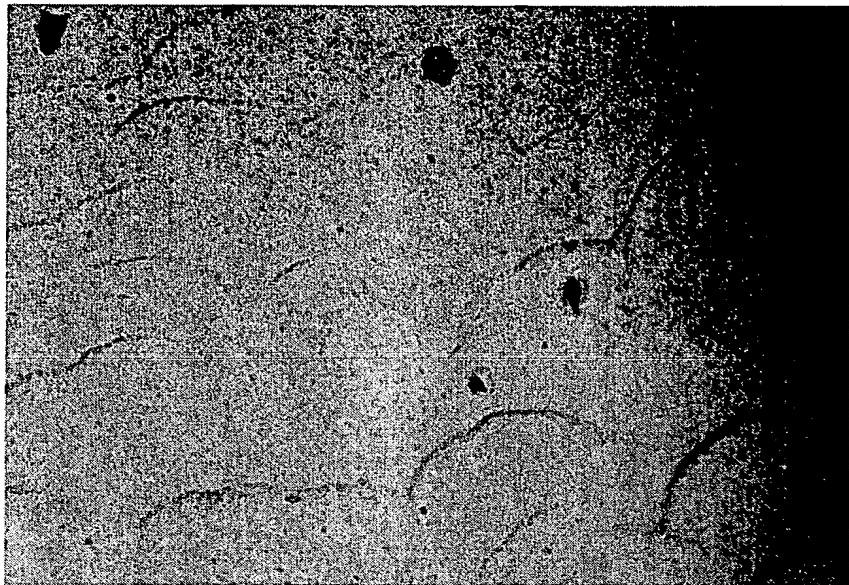
*FIG.4A*



*FIG.4B*

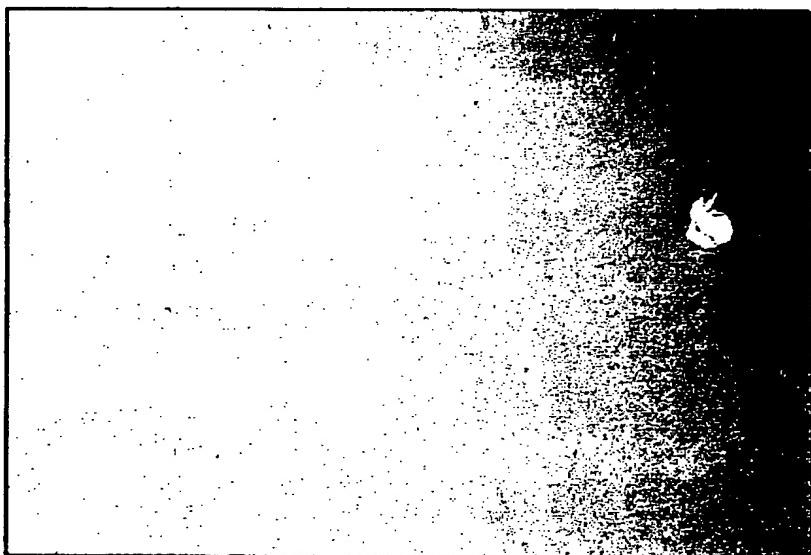


*FIG. 5*



SURFACE STATE B (250  $\mu\text{m}$   $\times$  190  $\mu\text{m}$ )

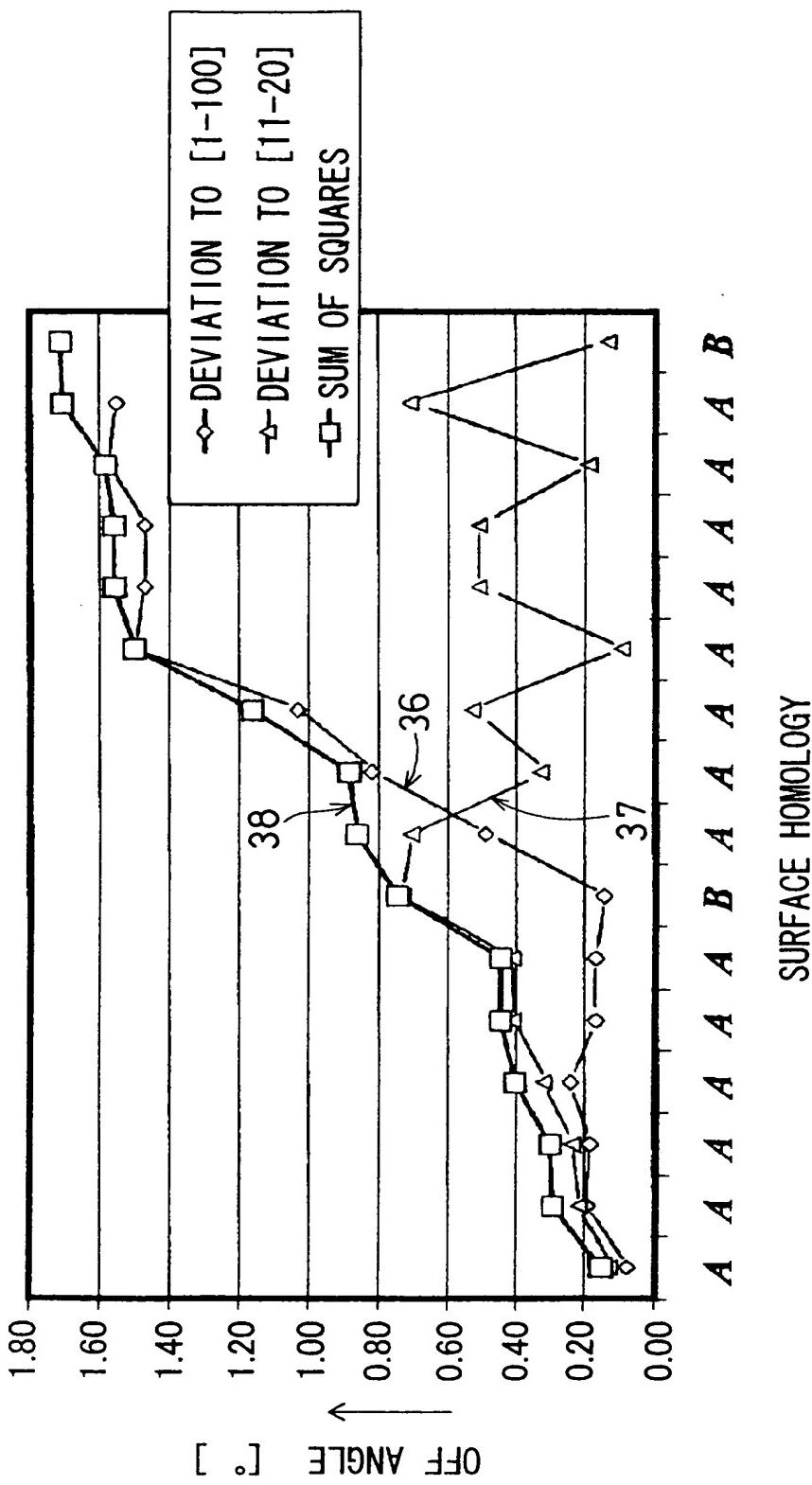
*FIG. 6*



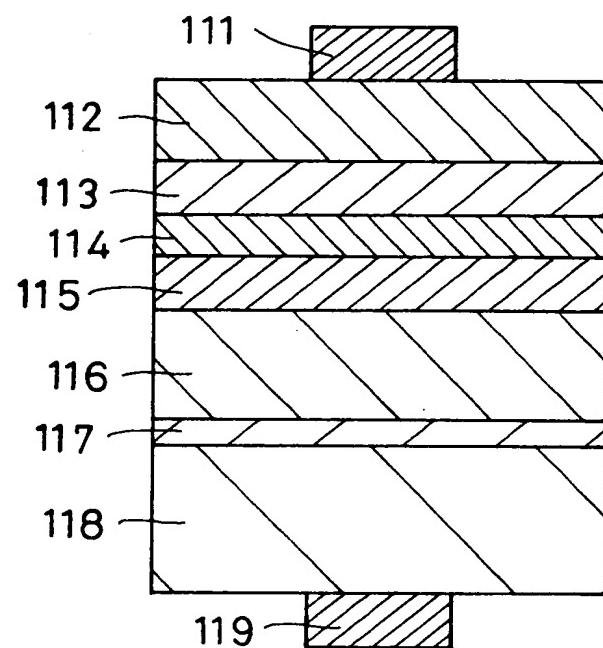
SURFACE STATE A (250  $\mu\text{m}$   $\times$  190  $\mu\text{m}$ )

FIG. 7

OFF ANGLE BETWEEN NORMAL LINE ON SURFACE OF ZrB<sub>2</sub> BOARD  
AND [0001] AXIS, AND SURFACE HOMOLOGY

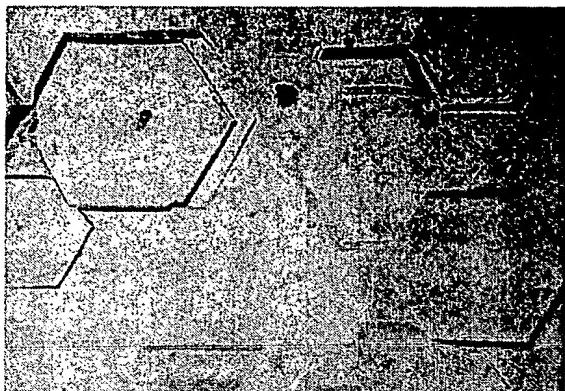


*FIG. 8*



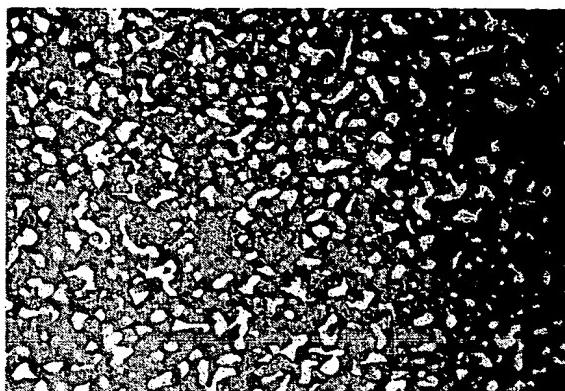
*FIG. 9*

(5)



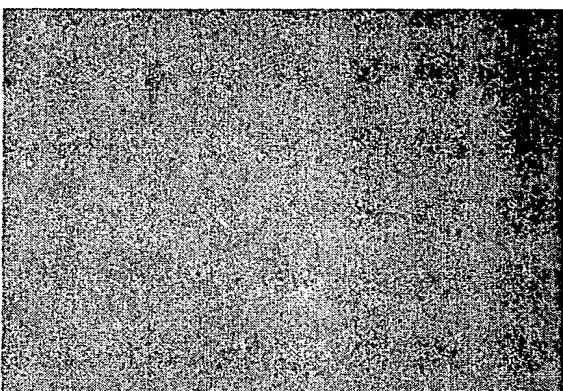
1100°C OR MORE 0.25 873 SECONDS

(1)



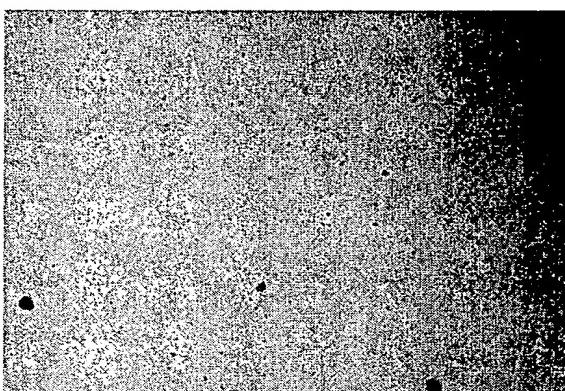
400°C 0.8 —

(2)



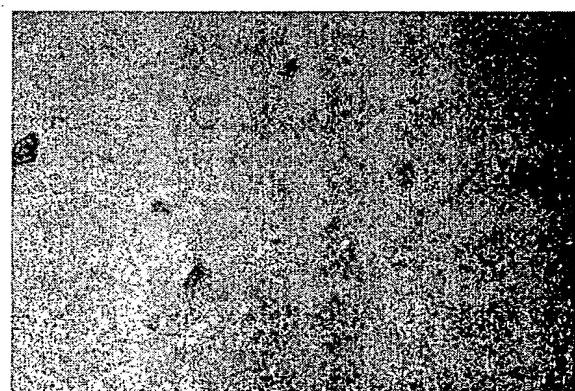
725°C 0.6 760 SECONDS

(3)



850°C 0.5 596 SECONDS

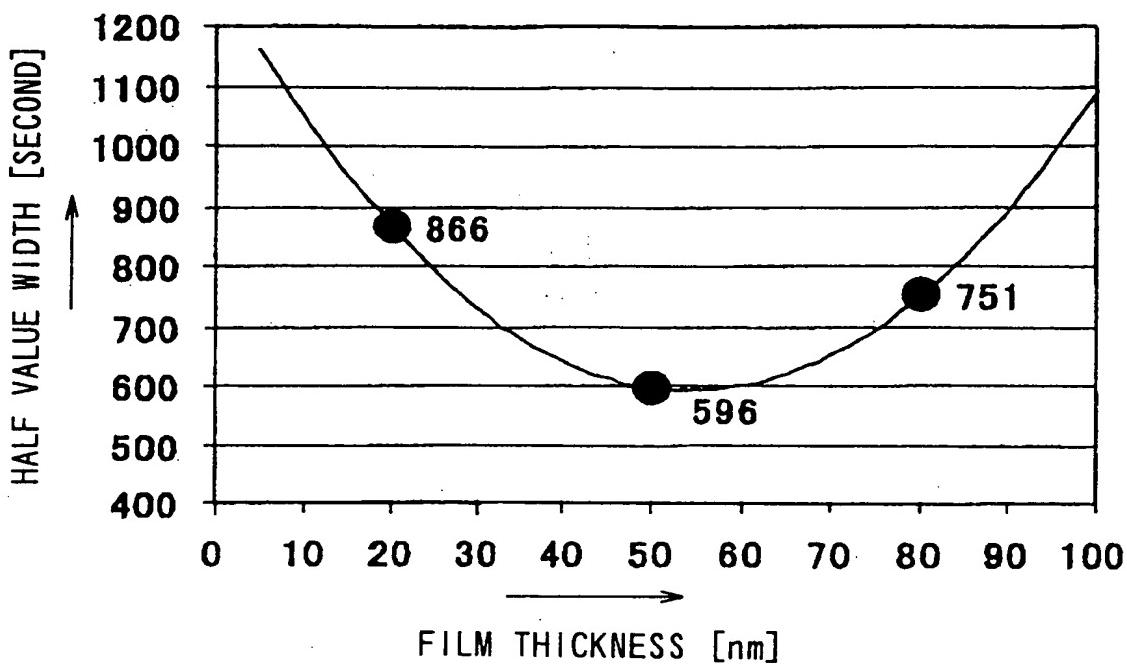
(4)



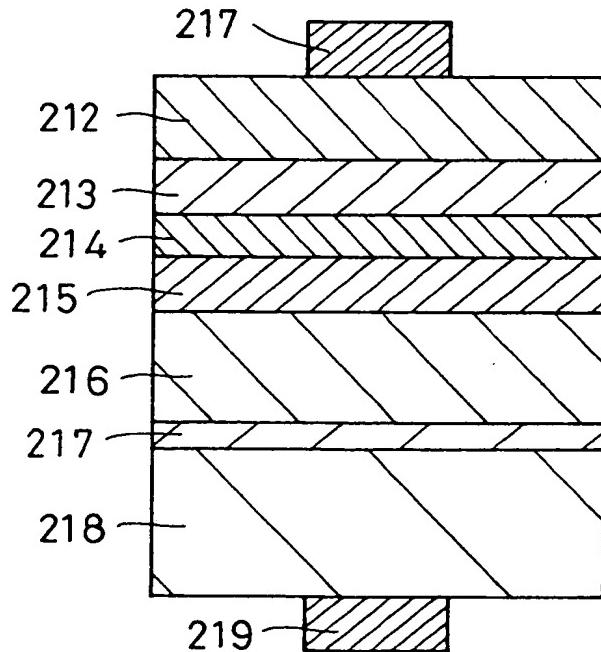
925°C 0.4 —

**FIG. 10**

RELATION BETWEEN FILM THICKNESS OF  
 $(\text{AlN})_x(\text{GaN})_{1-x}$  AND X-RAY HALF VALUE WIDTH

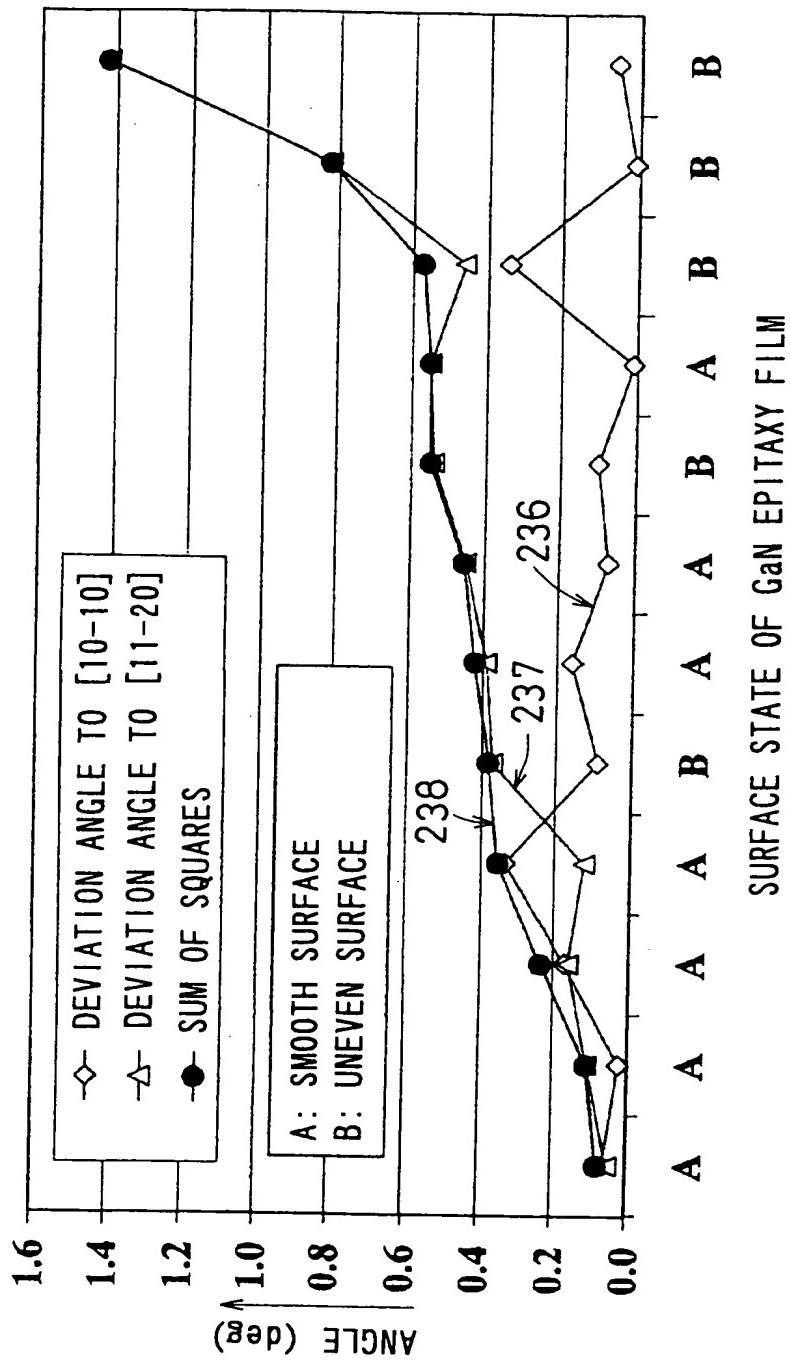


**FIG. 11**

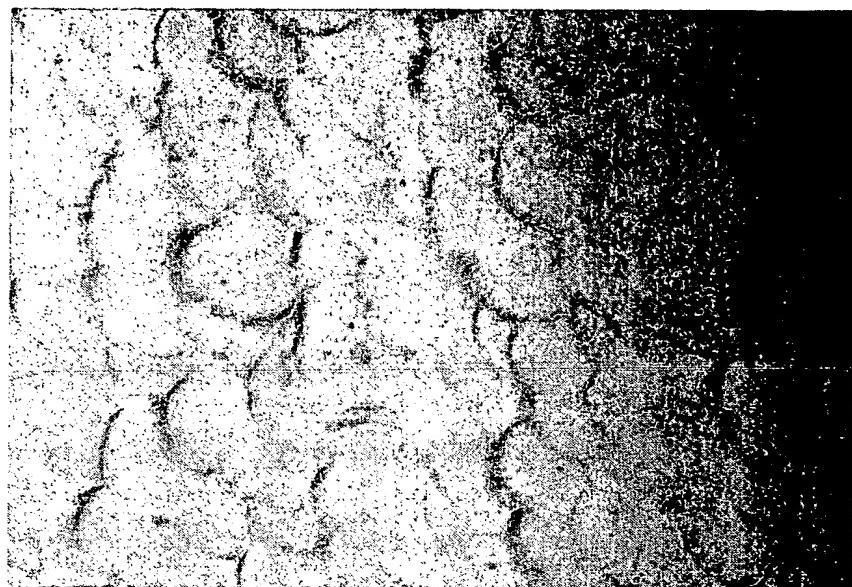


**FIG. 12**

RELATION BETWEEN OFF ANGLE OF NORMAL LINE OF SURFACE OF  $ZrB_2$  BOARD  
 FROM [0001] CRYSTAL AXIS AND SURFACE STATE OF GaN EPITAXY FILM

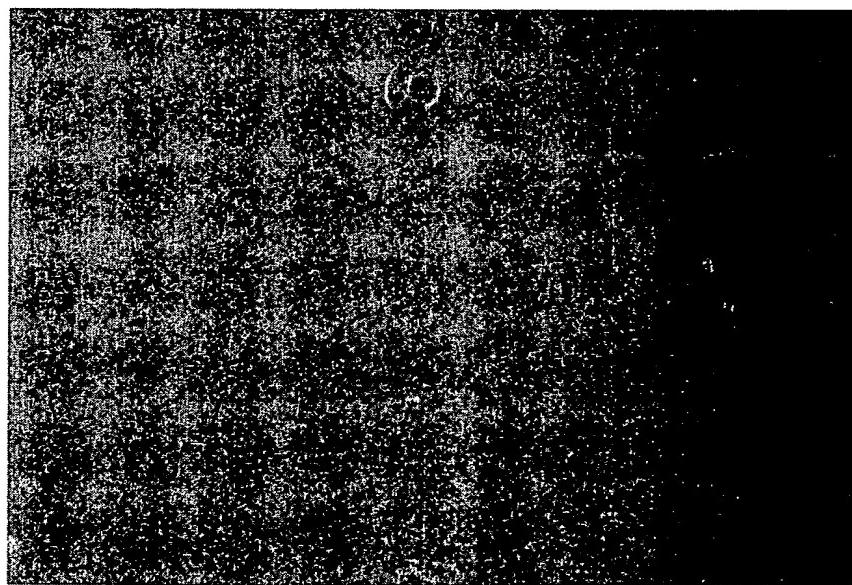


**FIG. 13**



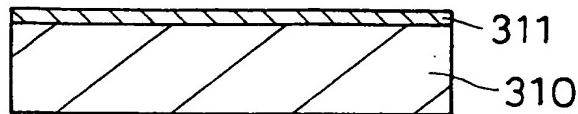
SURFACE STATE B (250  $\mu\text{m}$   $\times$  190  $\mu\text{m}$ )

**FIG. 14**

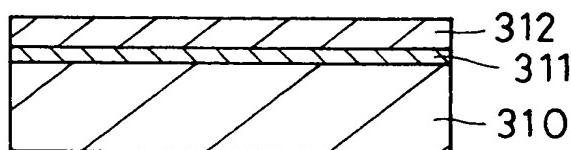


SURFACE STATE A (250  $\mu\text{m}$   $\times$  190  $\mu\text{m}$ )

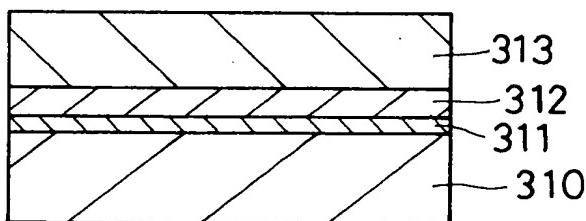
*FIG. 15A*



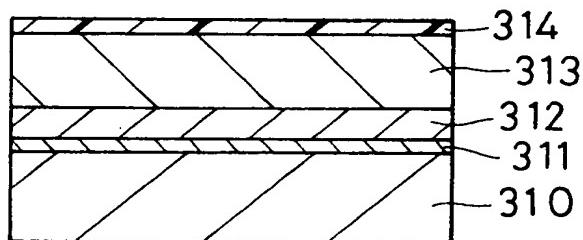
*FIG. 15B*



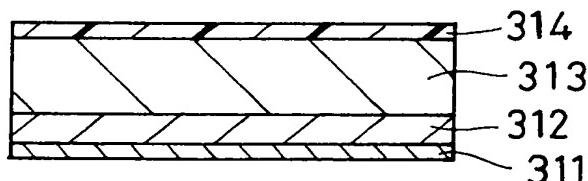
*FIG. 15C*



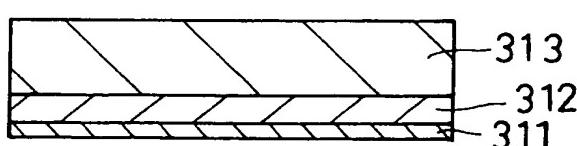
*FIG. 15D*



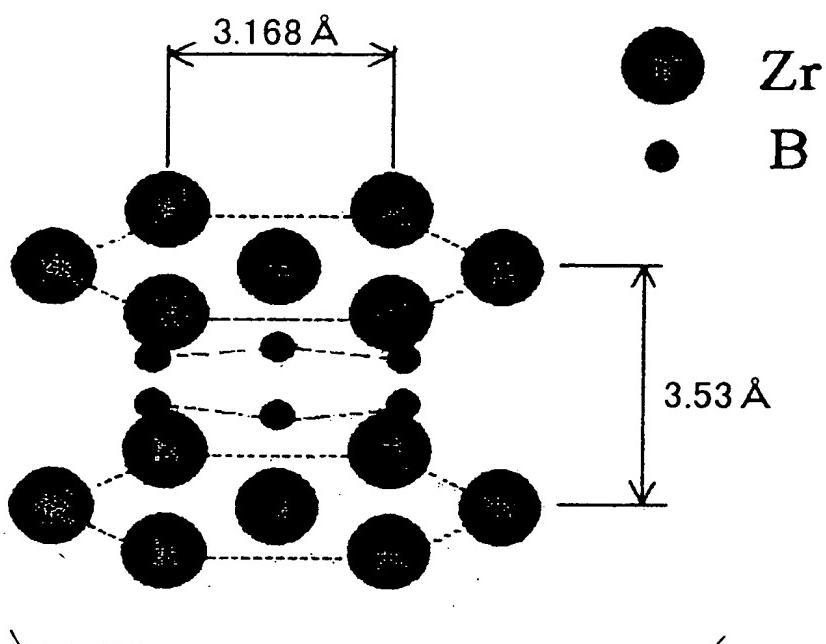
*FIG. 15E*



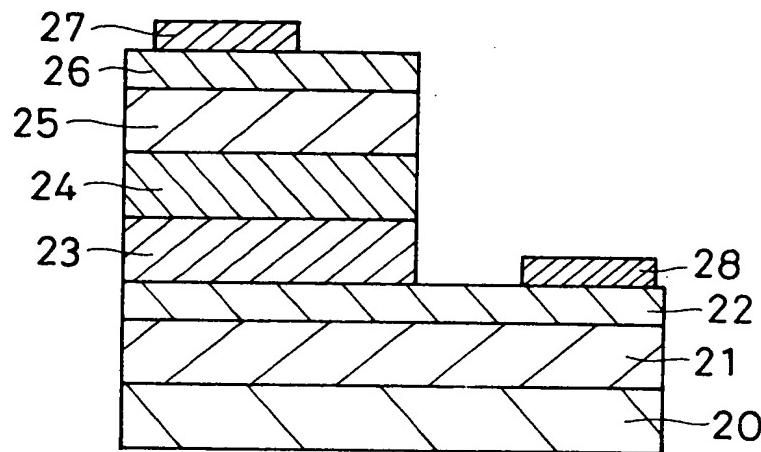
*FIG. 15F*



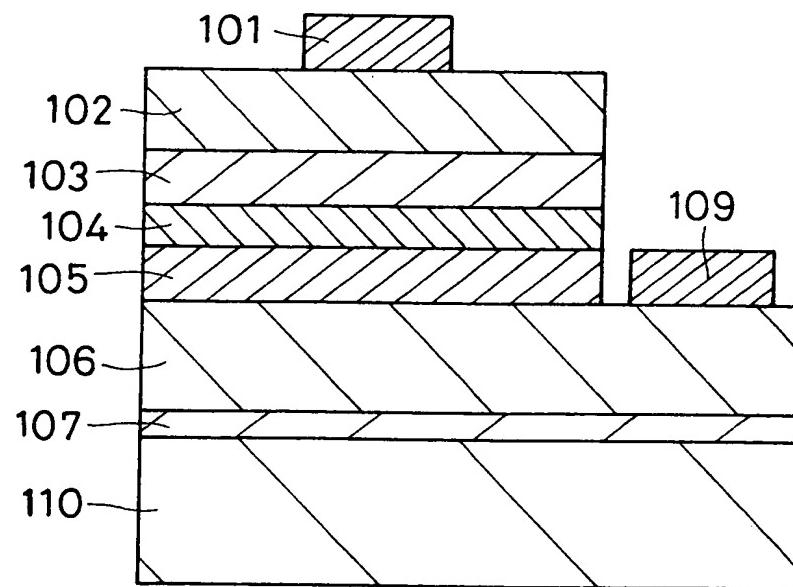
*FIG. 16*



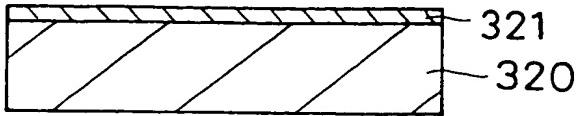
*FIG. 17 PRIOR ART*



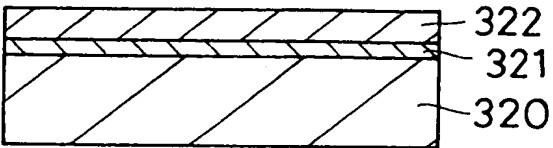
*FIG. 18 PRIOR ART*



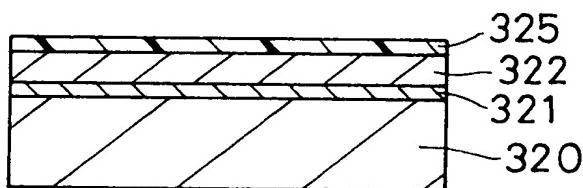
**FIG. 19A**  
**PRIOR ART**



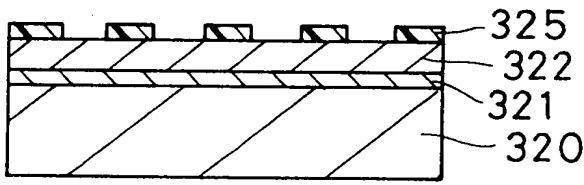
**FIG. 19B**  
**PRIOR ART**



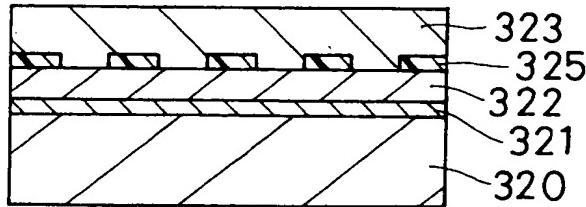
**FIG. 19C**  
**PRIOR ART**



**FIG. 19D**  
**PRIOR ART**



**FIG. 19E**  
**PRIOR ART**



**FIG. 19F**  
**PRIOR ART**

